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Substitute for form 1449A/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/730,272		
		Filing Date	December 9, 2003		
		First Named Inventor	Laval Chan Chun KONG		
		Group Art Unit	1624		
		Examiner Name	Unassigned		
Sheet	1	of	3	Attorney Docket Number	Viro-0005

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
CC		4,180,662		Pfister et al.	12/25/1979	
		6,187,799		Wood et al.	02/13/2001	
		6,747,057		Ruzafa et al.	6/2004	
		6,734,207		Uckun et al.	5/2004	
		6,660,732		Betageri et al.	12/2003	
		6,660,728		Scheunemann et al.	12/2003	
		6,620,767		Ducray et al.	9/2003	
		6,448,290		Ohuchida et al.	9/2002	
		6,414,013		Fancelli et al.	7/2002	
CC		6,380,214		Gant et al.	4/2002	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
CC		WO	98/52558		Bayer	11-26-1998		
		WO	02/28353		Weistock	04-11-2002		
		JP	7-48360		yoshitomi	02-21-1995		
		DE	199 20 247A		Jomaa	11-16-2000		
CC		DE	199 03 398A		Jomaa	08-10-2000		

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CC		David McKinnon et al., "The Conversions of Isothiazolium Salts Into Thiophenecarboxylic Ester Derivatives", <i>Can. J. Chem.</i> , 1984, Vol. 62, pp. 1580-1584	
		Pilar Goya et al., "Synthesis of 4-Oxo-3,4-dihydro-1 H-thieno [3,4-c] and thieno [3,2-c][1,2,6]thiadiazine 2,2-Dioxides, <i>Synthesis</i> , April 1989, pp. 280-282	
		Bo Sung Kim et al., "Reactions of Thiaroylketene S,N-Acetales with 1,3-Dicarbonyl Compounds in the Presence of Mercury (II) Acetate: A General Route to 2-Acyl- and 2-Aroyl-3-(alkylamino)-5-arythiophenes and 2-(Ethoxycarbonyl)-3-(methylamino)-5-arythiophenes", <i>J. Org. Chem.</i> , 1998, Vol. 63, pp. 6086-6087	
		Bo Sung et al., "A Facile and Convenient Synthesis of 3-Alkylamino-5-arythiophenes with a Variety of Substituents at C-2 and Studies of Reaction Mechanisms", <i>J. Org. Chem.</i> , 2000, Vol. 65, pp. 3690-3699	
		Ya. L. Gol'dfarb et al., "ACTION OF ALKALI METALS IN LIQUID AMMONIA ON SUBSTITUTED THIOPHENES. COMMUNICATION 9. PREPARATION OF 5-MERCAPTO-4-KETOALKANOIC ACIDS BY REDUCTIVE CLEAVAGE OF 4-ACETYLAMINO- AND 4-NITROTHIOPHENE-2-CARBOXYLIC ACIDS", <i>Izv. Akad. Nauk SSSR, Ser. Khim.</i> , 1984, Vol. 10, pp. 2136-2139	
		J. R. Desai et al.; <i>J. IND. CHEM. SOC.</i> , Vol. 74, 1997, p. 160, "Thieno[3,2-d]pyrimidines - Part-I: Preparation and Antimicrobial Activity of 3-N-Substituted-thioureido-2-methyl-6-phenylthieno[3,2-d]pyrimidin-4(3H)-ones", ISR ref. XP002220249.	
		E. Marchand, G. Morel, <i>BULL. SOC. CHIM. FR.</i> Vol. 133, No. 9, 1996, p. 803-912, "Alpha-Thioxothioamides Reactions de cycloaddition [4+2] avec l'acetylenedicarboxylate de dimethyle et le propiolate de methyle", ISR ref. XP002220251.	
		W. Kantlehner et al., <i>J. Prakt. Chem.</i> , Vol. 338, 1996, p. 403-413; "Orthoamide, IL. Umsetzungen von Orthoamid-Derivaten mit Schwefel und Selen, Synthesen von 1,3-Thiazol- und 1,3-Selenazolderivaten" ISR ref. XP002220245.	
		S. Vega et al., <i>Eur. J. Med. Chem.</i> Vol. 23, No. 4, 1988, p. 329-334; "Thiophene Isosteres: Synthesis and Pharmacological Study of 3-(azol-yl)thieno isothiazole-1,1-dioxides" ISR ref. XP002220246.	
CC		R.A. Smith et al., <i>Bioorg. Med. Chem. Lett.</i> Vol. 11, No. 20, 2001, p. 2775-2778; "Discovery of Heterocyclic Ureas as a New Class of Raf Kinase Inhibitors: Identification of a Second Generation Lead by a Combinatorial Chemistry Approach", ISR ref. XP001118699.	

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
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CC		B.S. Kim et al., J. Org. Chem. Vol. 63, No. 18, 1998, p. 6086-6087, "Reactions of Thioaroylketene S,N-Acetals with 1,3-Dicarbonyl Compounds in the Presence of Mercury(II) Acetate: A General Route to 2-Acyl- and 2-Aroyl-3-(alkylamino)-5-arylthiophenes and 2-(Etoxycarbonyl)-3-(methylamino)-5-arylthiophenes"; ISR ref. XP00118897.	
		A.M. Redman et al., Bioorg. Med. Chem. Lett., Vol. 11, 2001, p. 9-12; "P38 Kinase Inhibitors for the Treatment of Arthritis and Osteoporosis: Thienyl, Furyl, and Pyrrolyl Ureas", ISR ref. XP004225311.	
		D.J. Lee et al., Chemical Abstracts Service, Columbus, OH, U.S., "Novel Synthesis of 5,6-Dihydro-4H-thieno[3,2-b]pyrrol-5-ones via the Rhodium(II)-Mediated Wolff Rearrangement of 3-(2-Thienyl)-3-oxo-2-diazopropanoates"; Database accession no. 2002:151873, ISR ref. XP002220252.	
		M. Sugiyama et al., Chem. Pharm. Bull. Vol. 37, No. 8, 1989, p. 2091-2102; "Condensed Thienopyrimidines. I. Synthesis and Gastric Antisecretory Activity of 2,3-Dihydro-5H-oxazolo[thienopyrimidin-5-one Derivatives", ISR ref. XP001118351.	
		J.C. Lancelot et al., J. Heterocycl. Chem. Vol. 33, No. 2, 1996, p. 427-430; "A Facile Synthesis of New Beta-Lactams", ISR ref. XP002220247.	
		D.M. McKinnon et al., Can. J. Chem. Vol. 62, No. 8, 1984, p. 1580-1584; "The Conversion of Isothiazolium Salts into Thiophenecarboxylic Ester Derivatives", ISR ref. XP002220248.	
		J.R. Desai et al., J. Inst. Chemists (INDIA) Vol. 67, 1995, p. 136-137, "Thieno[3,2-d]pyrimidines - Part - II: Preparation and Antimicrobial Activity of 2-methyl-3-N-Arylsulphonamido-6-Phenylthieno[3,2-d]Pyrimidin-4(3H)-ones", ISR ref. XP002220249.	
		Co-pending Serial Application No. 10/166,031, filed June 11, 2002	
CC		Co-pending Serial Application No. 11/042,442, filed January 26, 2005	

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